

REMARKS

Reconsideration of the application is respectfully requested.

In liquid detergent compositions, especially those for the washing of textile fabrics, it is common to include one or more enzymes for assisting removal of various kind of soil. Amongst these are proteolytic enzymes, often referred to as "proteases". Proteases are used to assist in removal of protein-based soil. However, the very nature and activity of these enzymes means that they attack any other component in the liquid composition which has a protein-like structure. As a result, they can degrade other enzymes in the liquid, as well as undergoing self-degradation. To counteract this, it is usual also to incorporate an enzyme stabilising system. Such stabiliser systems commonly consist of a boron compound, eg. borax, together with a polyol, eg. glycerol or sorbitol. These two components are believed to form an enzyme-inhibiting complex which dissociates at the pH of the wash liquor, disabling the inhibiting effect so that the protease can act upon the proteins soil. See page 1, lines 11 – 29 of the specification.

In conventional liquid detergent compositions, it has long been known that peroxygen bleaches and enzymes interact such that they cannot be incorporated together and yet remain stable. See page 2, lines 29 – 31 of the specification. Since the atmospheric oxygen bleach catalysts work to catalyse bleaching activity of the dissolved atmospheric oxygen in any liquid in which they are incorporated, it can be expected that in liquid detergent compositions containing enzymes, they will catalyse the dissolved oxygen to attack those enzymes. However, surprisingly, the atmospheric oxygen bleach catalysts, and indeed the ligands from which the corresponding metal complex catalysts are formed, boost the stabilising effect of conventional kinds of enzyme stabiliser. This enables the amount of conventional stabiliser to be reduced. See page 3, lines 4 – 14 of the specification.

Claims 1-8, 11-22, 25-33, and 36 were rejected under 35 U.S.C. 103(a) as being unpatentable over EP 909,8094 in view of Getty et al. (US 6,020,294).

Applicants respectfully traverse the rejection. At the outset, applicants respectfully submit that it would not have been obvious to combine EP '809 with Getty. Specifically, EP '809 relates to fabric washing compositions. All examples appear to be liquid detergent compositions. Getty, on the other hand relates to granular and to dishwashing compositions. It should be noted that the art of the dishwashing cleaning compositions is substantially different from the art of fabric washing compositions and it would not have been obvious to combine the two documents. Furthermore, it is not seen how one of ordinary in the art would have just picked certain elements of Getty and not others (e.g. an extremely low surfactant concentration) to incorporate into EP '809 to arrive at the presently claimed compositions.

Even more importantly, even if the documents were combined as suggested by the Examiner and the *prima facie* case of obviousness were established, it is respectfully submitted that applicants' specification provides ample evidence of unexpected results (see section 716.02(a) MPEP). See numerous examples in the specification. Specifically, compare the second and third column in the examples to the first column (which is Control) and observe unexpected substantial improvement in the presence of atmospheric oxygen catalyst. There is no suggestion in the cited prior art that such unexpected results would be attained. On the contrary, as explained in applicant's specification at page 3, lines 1 – 8, it would have been expected that oxygen bleach catalyst would catalyse the bleaching activity, and thus, lead to enzyme instability.

It is not seen how one of ordinary skilled in the art, who has not had the benefit of hindsight afforded by the present disclosure, would have been led by EP '809 in combination with Getty to pick and choose certain elements of Getty which relates to granular dishwashing composition and incorporate them into EP '809 disclosure, which relates to fabric washing compositions, especially in the face of the prejudice in the art against incorporating bleaching compositions with enzymes and in the absence of any suggestion in the art of the unexpected improvement in stability as demonstrated in applicants' specification. Consequently, it is

respectfully requested that the rejection over EP '809 in combination with Getty be reconsidered and withdrawn.

In light of the above remarks, it is respectfully requested that the application be allowed to issue.

If a telephone conversation would be of assistance in advancing the prosecution of the present application, applicants' undersigned attorney invites the Examiner to telephone at the number provided.

Respectfully submitted,


Rimma Mitelman
Registration No. 34,396
Attorney for Applicant(s)

RM/sa
(201) 840-2671